

1/34/2 (Item 1 from file: 351)

011824680

WPI Acc No: 1998-241590/199822

Use of polycationic quaternised products as dye fixers in
detergents or rinses - with products being made by condensation of
piperazine(s) or imidazole(s) with halogen compounds or bis-epoxide(s) or
by self-condensation of e.g. tri-ethanolamine

Patent Assignee: BASF AG (BADI)

Inventor: BOECKH D; JAEGER H; LUX J A

Number of Countries: 020 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 19643281	A1	19980423	DE 1043281	A	19961021	199822	B
WO 9817762	A1	19980430	WO 97EP5606	A	19971010	199823	
EP 934382	A1	19990811	EP 97911213	A	19971010	199936	
			WO 97EP5606	A	19971010		
US 6025322	A	20000215	WO 97EP5606	A	19971010	200016	
			US 99284479	A	19990421		
JP 2001503089	W	20010306	WO 97EP5606	A	19971010	200116	
			JP 98518904	A	19971010		
US 6262011	B1	20010717	WO 97EP5606	A	19971010	200142	
			US 99284479	A	19990421		
			US 99467239	A	19991220		
US 20020045563	A1	20020418	US 99284479	A	19990421	200228	
			US 99467239	A	19991220		
			US 2001833623	A	20010413		
US 6465415	B2	20021015	WO 97EP5606	A	19971010	200271	
			US 99284479	A	19990421		
			US 99467239	A	19991220		
			US 2001833623	A	20010413		
EP 934382	B1	20021218	EP 97911213	A	19971010	200301	
			WO 97EP5606	A	19971010		
DE 59709029	G	20030130	DE 509029	A	19971010	200309	
			EP 97911213	A	19971010		
			WO 97EP5606	A	19971010		

Priority Applications (No Type Date): DE 1043281 A 19961021

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 19643281	A1		10	C11D-003/42	
WO 9817762	A1 G		22	C11D-003/00	

Designated States (National): JP US

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC

NL PT SE

EP 934382 A1 G C11D-003/00 Based on patent WO 9817762

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI NL

PT SE

US 6025322 A C11D-003/30 Based on patent WO 9817762

JP 2001503089 W 23 C11D-003/37 Based on patent WO 9817762

US 6262011 B1 C11D-003/37 Cont of application WO 97EP5606

Div ex application US 99284479

Div ex patent US 6025322

US 20020045563 A1 C11D-003/37 Div ex application US 99284479

Div ex application US 99467239

Div ex patent US 6025322

Div ex patent US 6262011

US 6465415 B2 C11D-003/37 Div ex application WO 97EP5606

Div ex application US 99284479
Div ex application US 99467239
Div ex patent US 6025322
Div ex patent US 6262011
EP 934382 B1 G C11D-003/00 Based on patent WO 9817762
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI NL
PT SE
DE 59709029 G C11D-003/00 Based on patent EP 934382
Based on patent WO 9817762
Abstract (Basic): DE 19643281 A

Use is claimed in detergents or post-wash compositions as polycationic dye transfer inhibitors and dye dissolution-reducing additives of compounds which have been quaternised with 4-25C alkylating agents after having been obtained by either: (A) condensing (i) 1 mol. of piperazine, a 1-25C alkyl- or di-1-25C 1,4-alkyl-piperazine, 1,4-bis-(3-aminopropyl)-piperazine, 1-(2-aminoethyl)-piperazine, 1-(2-hydroxy-(2-25C) alkyl)-piperazine, imidazole and/or 1-25C alkyl-imidazole with (ii) 0.8-1.1 mols. of an alkylene dihalide, epihalohydrin or bis-epoxide; or (B) heating triethanolamine or triisopropanolamine in presence of acid catalysts.

Also claimed are: (a) detergent containing (by wt.) 1-50% nonionic surfactant, 0-4% anionic surfactant and 0.05-2.5% of the above quaternised product; and (b) a post-wash composition containing 1-50% soft rinser, 1-50% nonionic surfactant and 0.1-2.5% of the above quaternised product.

Preferably component (A)(i) is piperazine, 1-(2-hydroxy- (or amino-)ethyl)-piperazine, imidazole and/or 1-3C alkyl imidazole and (A)(ii) is 1,2-dichloro-ethane or -propane, 1,3-dichloropropane, 1,4-dichlorobutane, epichlorhydrin and/or bis-epoxybutane.

ADVANTAGE - Products known from EP209787 and EP223064 for use in improving the fastness of reactive dyes are used in detergents and rinsing compositions to prevent both dissolution and transfer of dyes from fabrics.

Dwg.0/0

Derwent Class: A26; A97; D25

International Patent Class (Main): C11D-003/00; C11D-003/30; C11D-003/37;
C11D-003/42

International Patent Class (Additional): C11D-001/835; C11D-003/26;
D06L-001/02

Derwent WPI (Dialog® File 351): (c) 2003 Thomson Derwent. All rights reserved.

© 2003 The Dialog Corporation